

Replication Materials for Gauging Preference Stability under Authoritarianism

Jennifer Pan (Stanford) Yiqing Xu (Stanford)

Overview

The R code in this replication package conducts analyses using three data samples described in the paper. A master R script executes all code to generate figures and tables in the paper and the online Supplementary Materials. Replicators should expect the code to run for several hours.

Folder Structure

```
replication/  
  code/          # R scripts to replicate the empirical results  
  support/       # R scripts to prepare data files and measures  
  data/          # datasets and keybooks  
  graphs/        # figures generated by code  
  output/        # saved objects (.RData files)  
  tables/        # CSVs used to typeset tables  
  README.pdf     # Readme file  
  replication.Rproj # R project file  
  tables.xlsx    # formatted tables
```

Data Availability and Provenance Statements

Statement about Rights & Data Availability

- All data are collected by the authors and do not contain personally identifiable information.
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Dataset list

File name	Description	Collect Time	Vendor
orig_sample1.dta	Online Panel – China Urban Adults	2018	Qualtrics
orig_sample2.dta	Online Panel – China Urban Adults	2019	Dynata
sample3.dta	Chinese college students in China & United States	2019–2020	By authors

Computational requirements

Software requirements

The analyses were conducted in R (4.4.2) with the following package versions:

`Amelia` 1.8.3, `corrplot` 0.95, `doParallel` 1.0.17, `dplyr` 1.1.4, `fixest` 0.12.1, `foreach` 1.5.2, `GGally` 2.3.0, `ggplot2` 3.5.2, `gridExtra` 2.3, `haven` 2.5.4, `likert` 1.3.5, `psy` 1.2, `psych` 2.5.6, `readr` 2.1.5, `scales` 1.4.0, `tidyr` 1.3.1, and `writexl` 1.5.1.

Memory, Runtime, Storage Requirements

- Environment: Apple M1 Ultra (20 cores, 128GB RAM)
- Runtime: \approx 2 hours full run
- Storage: \geq 1GB recommended

Instructions to Replicators

Step 1: Load Project (and Set the Working Directory)

- Double-click `replication.Rproj` and open the project in RStudio, which automatically sets the working directory to the root folder of the replication package

Step 2: Run Replication Analyses

- Open `code/master.R`
- Execute R scripts in order.
 - This includes installing required packages and running all the analyses
 - Running the R scripts in the `code/support` folder (a) requires JAGS installation and (b) may take more than two hours to complete.
 - The remaining R scripts take no more than 10 minutes to complete.

Description of Code

Program	Description	Output
master.R	Runs full replication in order	
support/prepare_sample1.R	Create measures using orig_sample1.dta	sample1.dta
support/prepare_sample2.R	Create measures using orig_sample2.dta	sample2.dta
support/get_stability.R	Create temporal stability and predictability measures	s_temporal.RData
support/find_set.R	Find the most predictable combinations of questions	sample2_mi.RData s_bestset.RData
support/grmjags.bug	JAGS code for IRT models	
1_dimensionality.R	Explore dimensionality of preferences	Figure 1, Figure A5
2_measure.R	Make scatter plots of additive, PCA, and IRT measures	Figures A3, A4
3_stability.R	Plot temporal stability and predictability	Figures 2, 4; Table A5
4_plot_stat.R	Plot distributions of income and age in Samples 1 & 2	Figures A1, A2
5_college.R	Conduct analyses using Sample 3	Figure 3; Table A3(c)
6_sm_stats.R	Produces summary statistics	Table A1, A3(a)(b), A4
7_sm_reg.R	Conducts regression analyses	Tables A6, A7
8_sm_bestset.R	Print the most predictive combinations of questions	Table A8

Note: There is no need to replicate Tables 1, 2, and A2.

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Contact

For any questions about replication, please contact: Yiqing Xu: yiqingxu@stanford.edu

How to Cite

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